component within the package. The pinch clip lid includes a step lid (10) and cover (20). The step lid includes a peripheral notch (16) which defines a centering portion (18) that fits within a shoulder of a non-hermetic package (40) to center the lid on the package, and a large central aperture (12) with a shelf (14) on which a transparent window (a glass plate) is attached.

German nowhere describes that the pinch clip lid is configured to form a vacuum seal with a tool, and the window would render the use of such a tool undesirable. Reducing or eliminating the window to accommodate a vacuum seal with a tool would defeat the purpose of the windowed lid to provide visual inspection of the exposed electronic component within the package. It is therefore submitted that German neither describes nor suggests a cover having a stamped metallic body section having a top surface configured to form a vacuum seal with a tool, where the stamped body section that forms the vacuum seal is integral with the component retention member.

Claim 1 is therefore submitted to be patentable over German.

Independent Claim 12 recites an electrical component cover, comprising "a body section having opposite peripheral edges, opposed end edges, and a planar top surface extending therebetween, said top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures;" "a flange provided along at least one of said peripheral edges of said body section, said flange being configured to prevent movement of an upper end of an electrical component relative to said body section in at least one direction parallel to said top surface;" and "a release arm integrally formed with at least one of said opposed end edges of said body section, said release arm being configured to releasably retain an electrical component."

[illegible] vacuum seal with a tool, and the need taught by German to include the window in the lid is submitted to teach away from engaging a vacuum seal tool to the window.

Additionally, German describes that the cover (20) includes a central aperture (22) with four side portions (24). Tabs (26) extending from opposing sides (24) are bent underneath the step lid (10) to secure the cover (20) to the step lid (10).

German does not describe or suggest that the tabs (26) or the sides from which they depend serve to prevent relative movement of the cover relative to the electronic package as recited in Claim 12. Rather, the centering portion (18) that fits within a shoulder of a non-hermetic package (40) as described by German would preclude relative movement of the cover in a direction parallel to the top surface of the cover.

Still further, German describes that side bars (30) are attached to the attachment tabs (28) with suitable means such as spot welding. Claim 12 recites a release arm integrally formed with at least one of the opposed end edges of the body section.

For at least the reasons set forth above, Claim 12 is respectfully submitted to be patentable over German.

Independent Claim 22 recites an electrical component cover, comprising "a body section having peripheral edges and a planar top surface extending between said peripheral edges, said top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures" and "a release arm integrally formed with at least one of said at least two opposed edges of said body section, said release arm being configured to releasably retain an electrical component and configured to engage an electric component to hold an electric component a desired distance from said body section."

As noted above, German does not describe a cover having a top surface configured to [illegible] integrally formed with the cover. Rather, German describes a cover having a window (14) therein and side bars (30) which are separately attached to the attachment tabs (28) with suitable means such as spot welding.

Additionally, German does not describe a release arm being configured to engage an electrical component to hold an electronic component at a desired distance from the body section as recited in Claim 22. Rather, the centering portion (18) of German's cover (20), which the Office Action characterizes as a stop projection, is received in a shoulder of the electronic package, and the lid is held to the package with the side rails (30) and attachment tabs (28) on the sides of the package. The centering portion (18) described by German does not hold an electronic component in any aspect, but rather rests within or upon the electronic package (40).

For at least the reasons set forth above, Claim 22 is respectfully submitted to be patentable over German.

Claim 19 and 29 recite that the body section is injection molded with opposite ends molded integral with end walls of said release arm, the end walls extending in a direction transverse to a plane containing said planar top surface, and the end walls extending laterally along the opposite ends. German describes a cover (20) formed from sheet metal with separately attached side bars (30) to disengage the cover (20). Claims 19 and 29 are respectfully submitted to be neither described nor suggested by German.

Claim 11, 21 and 31 recite that the planar top surface is rigid to facilitate the formation of a vacuum seal. As noted above, German nowhere describes a vacuum seal in conjunction with the cover (20), and the cover (20) described by German includes a window that would defeat the use of a vacuum seal. Claims 11, 21 and 31 are respectfully submitted to be neither described nor suggested by German.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 2, 4, 8, 10-13, 15, 19, 21-23, 25, 29 and 31 be withdrawn.

The rejection of Claims [illegible] and 28 under 35 U.S.C. [illegible] as being unpatentable over German is respectfully traversed.

Preliminarily, Applicants note that Claims 3, 6, 7, 14, 17, 18, 24, 27 and 28 are dependent claims of which the respective independent claims are submitted to be patentable over German for the reasons set forth above.

Additionally, Claims 3, 14 and 24 recite a catch surface configured to be secured to a bottom of an electric component to retain the body section on an electric component. German describes a pair of attachment tabs (28) extending from sides (24) of the cover (20) which engage flat and smooth sides of a component package (40) without contacting a bottom of the component package. See German Figures 4 and 6. Only the bias of the side bars (30) engages the pinch lid described by German to the electronic package (40), and resultant pressure applied by the side bars (30) to the sides of the electronic package (40) holds the lid in place.

Nothing in the text or illustrations of German suggests that a catch surface secured to a bottom surface of an electrical component would be desirable or advantageous, and therefore it is submitted that German is not suggestive of the recited catch surface. The characterization in the Office Action that providing a catch surface to the lid described by German would be a mere change in the size of the component is respectfully traversed. A catch surface configured to be secured to a bottom of an electrical component would entail a change in shape, and not merely a change in size, of the attachment tabs (28) or side bars (30) of the cover (20) described by German. A motivation to make the requisite change in shape is nowhere apparent from German. Claims 3, 14 and 24 are therefore submitted to be patentable over German.

Likewise, with respect to the assertion that the recitations in Claims 6, 17 and 27 involve a mere change in size of the component's angle, it is respectfully submitted that the modification of the German reference to the invention claims in Claims 6, 17 and 27 entails a change in shape of the components that is not described, suggested or motivated by the German reference. Claims 6, [illegible] and 27 are therefore submitted to be patentable over German.

With respect to Claims 7, 18 and 28, the Office Action characterizes the centering portion (18) of the pinch lid as a stop beam configured to engage an electrical component. However,

German describes that the centering portion (18) is received in a shoulder of the electronic package, and the lid is held to the package with the side rails (30) and attachment tabs (28) on the sides of the package. The centering portion (18) of the lid (10) is received in a shoulder in the package (40) such that there is no separation between the pinch lid and the electronic package when the pinch lid is installed. Claims 7, 18 and 28 each recite that the stop beams are configured to engage an electric component to hold an electric component at a desired distance from the body section. The centering portion (18) described by German does not hold an electronic component in any aspect, but rather rests within or upon the electronic package (40).

Further, with respect to the assertion that providing a stop beam with an acute angle to the top surface involves a mere change in size of the component's angle, it is respectfully submitted that the modification of the German reference to the invention claims in Claims 7, 18 and 28 entails a change in the shape of the components that is not described, suggested or motivated by the German reference.

For at least the reasons set forth above, Claims 7, 18 and 28 are submitted to be patentable over German.

Applicants accordingly and respectfully request that the Section 103 rejection of Claims 3, 6, 7, 14, 17, 18, 24, 27 and 28 be withdrawn.

The rejection of Claims 5, 9, 16, 20, 26 and 30 under 35 U.S.C. § 103 as being unpatentable over German in view of Miyazawa (U.S. Patent No. 5,361,492) is respectfully traversed.

Independent Claim 1 recites a cover connectable to an electrical component to assist a tool in assembling the electrical component to another structure, the cover comprising "a stamped metallic body section having a top surface configured to form a vacuum seal with a tool," and "a component retention member integrally formed with an end of said body section for releasably securing said body section to an electrical component."

German describes a cover (20) including window and separately attached side bars (30) to engage an electronic package. As noted above, German nowhere describes a vacuum seal with a tool in conjunction with German's cover (20), and the cover described by German is not suited for the use of a vacuum tool by virtue of its construction with the window.

Miyazawa describes a cover (6) for use in automatically mounting electrical connectors (4) to a printed circuit board with the aid of a vacuum-suction nozzle (5). While the fabrication of the cover is not described, the cover (6) appears to be an injection molded piece. The cover includes a flat and smooth top plate (7) and opposite arms (9) which latch opposite side walls (8) of the connector housing (1). Pin-like projections (14) of the connector (4) contact the underside of the cover (6) and hooks (11) in each of the arms (9) latch the cover (6) in its position over the pin-like projections (14).

Applicants submit that a prima facie case of obviousness has not been established. It is submitted that the sheet metal construction of the German cover including the window is inconsistent and incompatible with the teaching of Miyazawa, which employs a molded piece construction including a solid flat cover over the top of an electric connector. Miyazawa's cover plate rests upon pin like projections (14) of an electrical connector while German's cover rests upon a shoulder in an electronic package. Miyazawa's pins (14) preclude the shoulder described by German, and the pins (14) would interfere with the cover (20) describe by German. Miyazawa's cover and German's cover are not structurally or functionally compatible and are clearly different in purpose and effect.

It is respectfully submitted that combining the pinch engagement feature of the German cover with the solid cover of Miyazawa is not suggested by the combination of references. Rather, the combination appears to be an impermissible hindsight reconstruction of the invention gleaning isolated aspects of Miyazawa and German in an attempt to deprecate the presently claimed invention.

Claim 1 is therefore submitted to be patentable over German in view of Miyazawa.

Claims 5 and 9 depend from Claim 1 and therefore are also submitted to be patentable over German in view of Miyazawa.

Independent Claim 12 recites an electrical component cover comprising "a body section having opposite peripheral edges, opposed end edges, and a planar top surface extending therebetween, said top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures;" "a flange provided along at least one of said peripheral edges of said body section, said flange being configured to prevent movement of an upper end of an electrical component relative to said body section in at least one direction parallel to said top surface;" and "a release arm integrally formed with at least one of said opposed end edges of said body section, said release arm being configured to releasably retain an electrical component."

As noted above, the combination appears to be an impermissible hindsight reconstruction of the invention gleaning isolated aspects of Miyazawa and German in an attempt to deprecate the presently claimed invention. For this reason alone, it is respectfully submitted that the rejection is improper and should be withdrawn.

Additionally, it is respectfully submitted that Miyazawa and German do not teach each limitation of Claim 12. German does not describe a flange provided along a peripheral edge of a body section that is configured to prevent movement of an upper end of an electrical component relative to said body section in at least one direction parallel to said top surface. Rather, the centering portion (18) that fits within a shoulder of a non-hermetic package (40) as described by German would preclude relative movement of the cover in a direction parallel to the top surface of the cover. Thus, the recited flange is rendered unnecessary in the German cover. Miyazawa describes arms (9) on opposite ends of the cover plate (7) but does not describe flanges on peripheral edges of the cover plate. Accordingly, the cited references fail to teach all of the limitations of Claim 12.

Claim 12 is therefore respectfully submitted to be patentable over German in view of Miyazawa.

Claims 16 and 20 depend from Claim 12 and therefore are also submitted to be patentable over German in view of Miyazawa.

Independent Claim 22 recites an electrical component cover, comprising "a body section having peripheral edges and a planar top surface extending between said peripheral edges, said top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures;" and "a release arm integrally formed with at least one of said at least two opposed edges of said body section, said release arm being configured to releasably retain an electrical component and configured to engage an electric component to hold an electric component a desired distance from said body section."

Neither the German cover nor the Miyazawa describe a release arm configured to engage an electric component to hold an electric component a desired distance from said body section. German's cover includes a centering portion (18) that fits within a shoulder of a non-hermetic package (40). In the absence of the retaining shoulder, there is no structure in the side bars (30) or attachment tabs (28) that would maintain the electrical component at a desired distance from the body. Miyazawa describes the cover plate resting on pin projections (14). In the absence of the pins (14) there is no structure in the arms (9) that would maintain the electrical component at a desired distance from the body. Collectively, the cited references fail to teach each recitation of Claim 22.

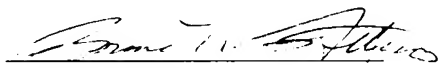
Claim 22 is therefore respectfully submitted to be patentable over German in view of Miyazawa.

Claims 26 and 30 depend from Claim 22 and therefore are also submitted to be patentable over German in view of Miyazawa.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 5, 9, 16, 20, 26 and 30 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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APPENDIX

Versions with Markings to Show Changes Made

IN THE CLAIMS

1. (once amended) A cover connectable to an electrical component to assist a tool in assembling the electrical component to another structure, the cover comprising:

a stamped metallic body section having a top surface configured to form a vacuum seal with a tool; and

a component retention member [connected to] integrally formed with an end of said body section for releasably securing said body section to an electrical component.

7. (once amended) The cover of claim 1, further comprising a stop beam extending from an end of said body section at an acute angle to said top surface, said stop beam being configured to engage an electrical component to hold an electrical component at a desired distance from said body section.

12. (once amended) An electrical component cover, comprising:

a body section having opposite peripheral edges, opposed end edges, and a planar top surface extending therebetween, said top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures;

a [an end] flange provided along at least one of said peripheral edges of said body section, said [end] flange being configured to prevent movement of an upper end of an electrical

a release arm [connected to] integrally formed with at least one of said [at least two] opposed end edges of said body section, said release arm being configured to releasably retain an electrical component.

16. (once amended) The cover of claim 12, wherein said release arm is formed with and bent downward from said body section, said release arm having a lower ledge bent inward to hold an electric component when said release arm is in a normally biased position.

22. (once amended) An electrical component cover, comprising:

a body section having peripheral edges and a planar top surface extending between said peripheral edges, said top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures; and

a release arm integrally formed with [connected to] at least one of said at least two opposed edges of said body section, said release arm being configured to releasably retain an electrical component and configured to engage an electric component to hold an electric component a desired distance from said body section.

26. (once amended) The cover of claim 22, wherein said release arm is formed with and bent downward from said body section, said release arm having a lower ledge bent inward to hold an electric component when said release arm is in a normally biased position.

28. (once amended) The cover of claim 22, a stop beam extending from an end of said body section at an acute angle to said planar top surface, said stop beam being configured to engage an electric component to hold an electric component at a desired distance from said body section.